



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,200	02/15/2002	Eugene L. Lew	214442US8	7045
22850	7590	04/01/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PATEL, ASHOKKUMAR B	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,200

Applicant(s)

LEW ET AL.

Examiner

Ashok B. Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Application Number 10/075, 200 was filed on 02/15/2002. Claims 1-26 are subject to examination.

Claim Rejections - 35 USC § 112

2. Claims 1, 4, 10, 12, 18, 19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "a maximum data rate" in claims 1, 4, 10, 12, 18, 19 and 21 is a relative term which renders the claim indefinite. The term "a maximum data rate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purpose of this office action it has been taken as "the most available."

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-26 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-26 of copending Application No. 10/075, 196. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims along with all other dependent claims, 1 and 8, 10 and 16, 18 and 19 and 25 are directed towards the most available data rate of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2154

7. Claims 1, 3, 4, 9, 10, 12, 17-19, 21 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated Belostotsky et al. (hereinafter Belostotsky) (US 2002/0052205 A1).

Referring to claim 1,

The reference teaches a method for dynamic bandwidth provisioning (page 1, para.[0016]), comprising the steps of:

receiving a provisioning event requesting a maximum data rate for a modem (page 3, para.[0043], "The Local Scheduler 620 processes incoming bandwidth requests and generates data grants in accordance with the Service, registered for the requesting SID (Station ID).");

generating a modem configuration file for the modem to implement the maximum data rate based on the provisioning event (page 3, para.[0040]); and

transmitting the modem configuration file to the modem such that the modem will implement the maximum data rate.(page 3, para.[0039])

Referring to claim 3,

The reference teaches the method of claim 1, further comprising the steps of: determining after the receiving step whether the provisioning event is a start time provisioning event after the receiving step; waiting for a start time if the provisioning event is a start time provisioning event; and performing the generating and transmitting steps when the start time has been reached. (page 3, para.[0040])

Referring to claim 4,

The reference teaches the method of claim 1, further comprising the steps of: determining after the receiving step whether the provisioning event is a stop time

Art Unit: 2154

provisioning event after the receiving step; waiting for a stop time if the provisioning event is a stop time provisioning event; generating another modem configuration file for the modem when the stop time has been reached to implement a previous maximum data rate based on a data rate of the modem prior to receiving the provisioning event; and transmitting the another modem configuration file to the modem such that the modem will implement the previous maximum data rate. (page 3, para.[0040], Figs. 4 and 5)

Referring to claim 9,

The reference teaches the method of claim 1, where the receiving step comprises receiving the provisioning event through at least one of a customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism. (page 3, para.[0043], "The Local Scheduler 620 processes incoming bandwidth requests and generates data grants in accordance with the Service, registered for the requesting SID (Station ID).");

Referring to claim 10,

Claim 10 is claim to a system for dynamic bandwidth provisioning that carries out the method of claim 1. Therefore claim 10 is rejected for the reason set forth for claim 1.

Referring to claim 12,

Claim 12 is claim to the system for dynamic bandwidth provisioning that carries out the method of claims 3 and 4. Therefore claim 12 is rejected for the reason set forth for claims 3 and 4.

Referring to claim 17,

Art Unit: 2154

Claim 17 is claim to the system for dynamic bandwidth provisioning that carries out the method of claim 9. Therefore claim 17 is rejected for the reason set forth for claim 9.

Referring to claim 18,

Claim 18 is claim to a system for dynamic bandwidth provisioning that carries out the method of claim 1. Therefore claim 18 is rejected for the reason set forth for claim 1.

Referring to claim 19,

Claim 19 is claim to a computer program product, comprising: a computer storage medium; and a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic bandwidth provisioning that carries out the method of claim 1. Therefore claim 19 is rejected for the reason set forth for claim 1.

Referring to claim 21,

Claim 21 is claim to the computer program product, comprising: a computer storage medium; and a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic bandwidth provisioning that carries out the method of claims 3 and 4. Therefore claim 21 is rejected for the reason set forth for claims 3 and 4.

Referring to claim 26,

Claim 26 is claim to a computer program product, comprising: a computer storage medium; and a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic bandwidth provisioning that carries

out the method of claim 9. Therefore claim 26 is rejected for the reason set forth for claim 9.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 7, 8, 11, 15, 16, 20, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belostotsky et al. (hereinafter Belostotsky) (US 2002/0052205 A1) in view of Cloonan et al.(hereinafter Cloonan) (US 2002/0065907 A1)

Claims 2, 7 and 8,

Keeping in mind the teachings of the reference Belostotsky as stated above, the reference Belostotsky fails to explicitly teach the method of claim 1, further comprising the step, following the generating step, of: rebooting the modem to obtain the modem configuration file, and wherein the rebooting step comprises rebooting the modem using at least one of a dynamic host configuration protocol command and another configuration protocol command, and method of claim 1, wherein the transmitting step comprises transmitting the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

The reference Cloonan teaches at page 9, para.[0096], "The DHCP server 127 then updates the DHCP map storage 129 with the new service level package name

239. This ensures that the cable modem 109 will use the cable modem configuration file corresponding to the new service level package when it reboots." The reference Cloonan also teaches at page 3, para.[0033], "Turning back now to the cable modem manager 111, it includes a Trivial File Transfer Protocol or "TFTP" server 123 having a cable modem configuration file storage 125. The cable modem configuration file storage 125 stores the configuration files each cable modem requires to properly initialize and begin operating. As will be discussed in detail below, the TFTP server 123 retrieves the cable modem configuration files from the cable modem configuration file storage 125, and transmits them to the cable modems 109 upon their initialization." (rebooting the modem to obtain the modem configuration file, and wherein the rebooting step comprises rebooting the modem using at least one of a dynamic host configuration protocol command and another configuration protocol command, and method of claim 1, wherein the transmitting step comprises transmitting the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.)

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to apply the teachings of the reference Cloonan for rebooting and transferring the configuration files to modem to Belostotsky's service maintenance system for rebooting.

It would have been obvious because, as taught by Cloonan, it ensures that the cable modem will use the cable modem configuration file corresponding to the new service level package when it reboots.

Art Unit: 2154

Referring to claims 11, 15 and 16,

Claims 11, 15 and 16 are claims to the system for dynamic bandwidth provisioning that carries out the method of claims 2, 7 and 8. Therefore claims 11, 15 and 16 are rejected for the reason set forth for claims 2, 7 and 8.

Referring to claims 20, 24 and 25,

Claims 20, 24 and 25 are claims to the computer program product, comprising: a computer storage medium; and a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic bandwidth provisioning that carries out the method of claims 2, 7 and 8. Therefore claims 20, 24 and 25 are rejected for the reason set forth for claims 2, 7 and 8.

10. Claims 5, 6, 13, 14, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belostotsky et al. (hereinafter Belostotsky) (US 2002/0052205 A1) in view of White (US 6, 233, 687 B1)

Referring to claims 5 and 6,

Keeping in mind the teachings of the reference Belostotsky as stated above, the reference Belostotsky fails to explicitly teach the method of claim 1, wherein the configuration file comprises a digitally signed file, and method of claim 1, wherein the configuration file comprises an MD5 file.

The reference White teaches at col. 5, lines 49-57, "The cable modem 104A receives the configuration file at receive circuit 402 and performs an MD5 digest on the parameter portions (illustrated as data file 412) of the configuration file in order to

calculate an integrity check value.”(configuration file comprises a digitally signed file, and method of claim 1, wherein the configuration file comprises an MD5 file.)

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to apply the teachings of the reference White for the configuration files to Belostotsky’s service maintenance system for transferring the new configuration to the modem.

It would have been obvious because, as taught by White, if the calculated integrity check value does not match the integrity check information, the cable modem discards the configuration file because it is assumed that portions of the configuration file were tampered with while enroute from the provisioning system.

Referring to claims 13 and 14,

Claims 13 and 14 are claims to the system for dynamic bandwidth provisioning that carries out the method of claims 5 and 6. Therefore claims 13 and 14 are rejected for the reason set forth for claims 5 and 6.

Referring to claims 22 and 23,

Claims 22 and 23 are claims to the computer program product, comprising: a computer storage medium; and a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic bandwidth provisioning that carries out the method of claims 5 and 6. Therefore claims 22 and 23 are rejected for the reason set forth for claims 5 and 6.

Conclusion

Examiner’s note: Examiner has cited particular columns and line numbers in the

Art Unit: 2154

references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100